

INTERACTIVE COMPUTER-AIDED DIAGNOSIS METHOD AND SYSTEM
FOR ASSISTING DIAGNOSIS OF LUNG NODULES
IN DIGITAL VOLUMETRIC MEDICAL IMAGES

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ABSTRACT OF THE DISCLOSURE

10 A computer-assisted diagnosis method for assisting
diagnosis of anatomical structures in a digital volumetric
medical image of at least one lung includes identifying an
anatomical structure of interest in the volumetric digital
medical image. The anatomical structure of interest is
automatically segmented, in real-time, in a predefined volume
of interest (VOI). Quantitative measurements of the
anatomical structure of interest are automatically computed,
in real-time. A result of the segmenting step and a result of
the computing step are displayed, in real-time. A likelihood
that the anatomical structure of interest corresponds to a
disease or an area warranting further investigation is
estimating, in real-time, based on predefined criteria and the
20 quantitative measurements. A warning is generated, in real-
time, when the likelihood is above a predefined threshold.